

CLAIMS

1. A system for assisting the regeneration of depollution means (1) associated with oxidation catalyst-forming means (2), and integrated in an exhaust line (3) of a motor vehicle diesel engine (4), and in which the engine (4) is associated with common rail means (7) for feeding fuel to the cylinders of the engine and adapted, at constant torque, to implement a strategy of regeneration by injecting fuel into the cylinders in at least one postinjection, the system being characterized in that it comprises:

- detector means (8) for detecting a request (req.RG) for regeneration and thus for postinjection;
- detector means (9) for detecting that the vehicle accelerator pedal is being raised;
- acquisition means (11) for acquiring the temperature downstream from the catalyst-forming means (2);
- determination means (8) for determining, on the basis of said temperature, a maximum duration for applying postinjections during a stage in which the engine is returning to idling as a result of the accelerator pedal being raised; and
- cutoff means (7, 8) for immediately cutting off the or each postinjection as soon as the duration of postinjection use has reached the predetermined maximum duration of application.

2. A system according to claim 1, characterized in that the depollution means (1) comprise a particle filter.

3. A system according to claim 1 or claim 2, characterized in that the depollution means (1) comprise a NOx trap.

4. A system according to any preceding claim, characterized in that the fuel includes an additive for

becoming deposited together with the particles with which it is mixed on the depollution means (1) in order to facilitate regeneration thereof.

5 5. A system according to any one of claims 1 to 3, characterized in that the fuel includes an additive forming a NOx trap.

10 6. A system according to any preceding claim, characterized in that the engine is associated with a turbocharger (5, 6).